APPLICANT(S): COTER, Florin

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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or

disclaimer to resubmission in a divisional or continuation application claims indicated as

cancelled:

1. (Previously presented) A method for determining the distance of a transceiver located

within a lumen from the center of the lumen and for determining the radius of the lumen, the

lumen cross-section being substantially circular at the transceiver location, the method

applied on data received from a transceiver placed at a position within the lumen that is

distance (r) from the center, the method comprising:

transmitting a signal of known velocity (v);

receiving two echo signals, the first signal related to a near section of the lumen and

the second signal related to an outermost section of the lumen;

timing a first time difference between the transmission time of the transmitted signal

and reception time of the first echo signal (t1) and a second time difference

between the transmission time of the transmitted signal and the reception time of

the second echo signal (t2);

calculating the distance of the transceiver from the center of the lumen r using the

equation r = (t1-t2)v/4; and

calculating the radius of the lumen R using the equation R = (t1+t2)v/4.

2. (Currently Amended) A method for determining the radius of a lumen, the lumen

cross-section being substantially circular at the transceiver location, the method applied on

data received from a transceiver placed at a position within the lumen, the method

comprising:

transmitting a signal of known velocity (v);

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receiving a secondary echo signal elated related to the signal traversing twice the diameter of the lumen;

timing a time difference between the transmission time of the transmitted signal and reception time of the secondary echo signal (t3)

calculating the radius of the lumen using the equation R = (t3)v/4.